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1953 SEASON

COKER 100 WH. STepartment of Agriculture

1952 BREEDER'S REGISTERED SEED

Picking 100 boll samples in our 1952 Coker 100 Wilt strains test near Chester, S. C.



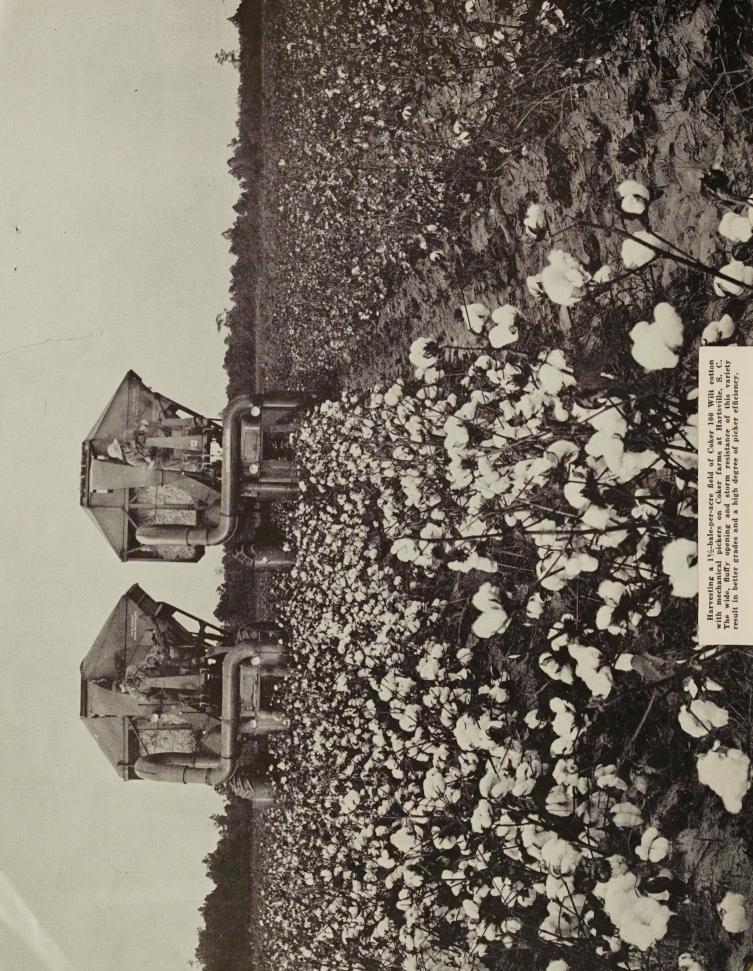
COKER'S PEDIGREED SEED COMPANY

Hartsville



South Carolina

The South's Foremost Seed Breeders



TO OUR FRIENDS AND CUSTOMERS THROUGHOUT THE SOUTH



ROBERT R. COKER President and Treasurer

It is generally agreed that the complete mechanization of cotton growing, long thought to be desirable, is now recognized as a practical necessity if we are to successfully overcome increased labor and production costs. In order to find out firsthand about the possibilities of complete mechanization of cotton growing, we conducted a 25acre pilot farm study during the 1952 season on our own farms in the Pee Dee area of the Coastal Plains section of South Carolina. Our results indicate that complete mechanization of cotton production may soon be a reality.

Two combinations of treatments were compared: partial mechanization and complete mechanization. In both combinations the land was prepared and the crop was

planted, fertilized, cultivated and sprayed for insect control with a four-row tractor and equipment. The partially-mechanized plots were hand hoed and hand picked. The fully-mechanized plots were treated with pre-emergence and postemergence chemicals, flamed with a flame cultivator, and picked with a spindle-type picker. Chloro-IPC was applied as a pre-emergence material on 20 acres of the completely mechanized plot, and Dinitro was applied on 5 acres. A postemergence material, Esso Weed Killer 38, was applied to the 5 acres which had been treated with the Dinitro. The completely mechanized plot was flamed 6 times and there was no hand hoeing in it. For comparative production costs see page 17.

Due to this limited experience with pre-emergence chemicals and inadequate experimental data, it is not yet possible to recommend their general use to replace conventional weed control measures in cotton production. However, it was clearly demonstrated in these studies that cotton can be produced practically, more efficiently, and cheaper when all steps are mechanized by the use of tractor equipment, pre-emergence and post-emergence herbicides, flame cultivation, chemical defoliation, and mechanical picking.

Sincerely,

Robert R. Coker

Long ago our breeders developed, by hybridization and subsequent selection, new cotton varieties that were improvements in yield, picking quality, regional adaptation, staple length, lint percentage, boll size, and earliness. By extensive testing on infested soils we developed wilt-resistant varieties that produced highest yields of superior quality cotton on soils infested with wilt and on wilt free soils. This work has been continued with a most gratifying continual improvement in the performance of Coker 100 Wilt strains.

Since 1941, in addition to employing the methods outlined above, we have made full use of fiber technology in our breeding programs. The establishment of a Fiber Testing Service by the U.S.



J. WINSTON NEELY Vice-President, Director of Plant Breeding and Agricultural Research

Department of Agriculture provided, on a fee basis, facilities for determining the quality of fiber produced by our breeding stocks. These services have made possible the development of Coker 100 Wilt with its outstanding fiber and spinning qualities and milling performance. In our breeding program we obtain, in addition to knowledge concerning the agronomic characteristics of our cottons, data on the fiber tensile strength, upper-half-mean and mean lengths, length uniformity, fineness, maturity, yarn strength, yarn appearance, and mill performance.

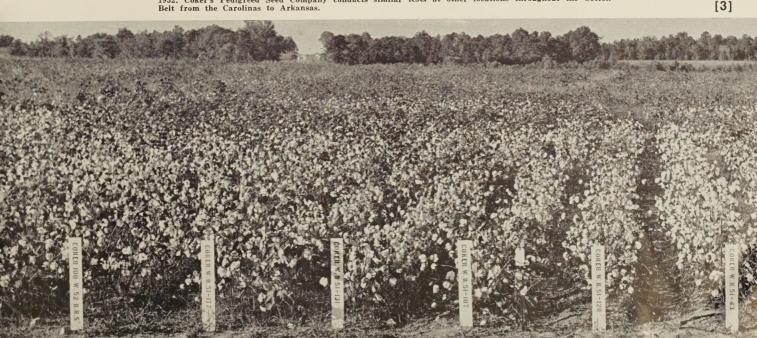
For many years we have devoted a great deal of effort toward the development of a cotton that would be well adapted to mechanized production. As a result there is no other variety better adapted to mechanized production than is Coker 100 Wilt,

It affords us a feeling of genuine pride to offer Coker 100 Wilt 1952 Breeder's Registered Seed because in this outstanding variety we have attained the best combination of desirable characteristics that we have been able to breed into a single variety during our many years of plant breeding effort.

Sincerely,

J. Winston Neely

This picture shows a view of a variety test of Coker 100 Wilt conducted at Chester, South Carolina, in 1952. Coker's Pedigreed Seed Company conducts similar tests at other locations throughout the Cotton Belt from the Carolinas to Arkansas.



COKER 100 WILT

1952 Breeder's Registered Seed

Our 1952 Breeder's Registered Seed possesses the best combination of desirable characteristics of any variety that we have ever bred or tested. It was developed through many years of scientific breeding and testing to provide the cotton grower with a variety that would net more money than any other variety that he could plant.

YIELDING ABILITY

Maximum yields are necessary for greatest profit. Coker 100 Wilt, because of its wide adaptation, abundant fruiting characteristic, wilt resistance, earliness, and stormproofness, has been outstanding in yield. The ability of Coker 100 Wilt to produce high yields has been conclusively proved in our own experimental tests on wilt-infested soils from the Carolinas through Mississippi and Arkansas and by results obtained in tests conducted by State and Federal experiment stations throughout the cotton belt. Its performance on thousands of farms has shown it to be a truly outstanding variety. In 37 five-acre statewide contests in North Carolina, South Carolina, and Georgia, Coker 100 Wilt has won first place 35 times.

WILT RESISTANCE

Fusarium wilt has infested the soils of large areas throughout the entire cotton belt. Profitable yields cannot be obtained unless a wilt-resistant variety is grown. Our trained and experienced plant breeders and pathologists are working together in breeding for wilt resistance. They have succeeded in combining high yields and excellent fiber quality with resistance. Coker 100 Wilt, because of its yielding ability, is a leading producer on non-wilt soils. This characteristic, combined with high wilt-resistance, makes Coker 100 Wilt the cotton that can be depended upon for profitable yields of high quality cotton in wilt-infested fields.

PICKING QUALITY

Coker 100 Wilt, being early and having fluffy bolls, thin foliage, and desirable plant type, is especially adapted to hand or machine picking. The ease with which it can be cleaned in the gin assures the grower of a sample with the minimum amount of trash and the best gin preparation that could be obtained with any variety. Growers who have been leaders in mechanized production have been enthusiastic in their praise of Coker 100 Wilt and its adaptation to mechanical harvesting.

FIBER QUALITY

Coker 100 Wilt is outstanding in quality of fiber as the result of many years of breeding, selection, and testing for improved fiber and spinning characteristics. Through an amendment to the Smith-Doxey Act, passed in 1941, the services of the fiber and spinning laboratories of the U. S. Department of Agriculture were made available to breeders and others on a fee per sample basis. Tens of thousands of lint samples of Coker 100 Wilt breeding stocks

have been sent to these laboratories during the 11 years that these services have been available. The extensive use of fiber technology in the selection of new strains has resulted in the 1952 Breeder's Registered Strain being outstanding in fiber and spinning qualities and in its being sought for and praised by the cotton mills. This has been accomplished along with an increase in yield and an improvement in other characteristics. Cotton buyers and cotton manufacturers recognize Coker Wilt as being a cotton with character and with a very low amount of waste.

STAPLE LENGTH

Coker 100 Wilt produces a staple of $1\frac{1}{32}$ to $1\frac{3}{32}$ inches on average soils in average seasons. In favorable seasons and on heavy, fertile soils, such as those in the Mississippi Delta, it frequently produces a longer staple.

COKER 100 WILT '52 BREEDER'S REGISTERED SEED

DESCRIPTION

Plant—Erect, semi-determinate in type. Vigorous with more erect branches. Well adapted to mechanized culture and harvesting, and to control of insects.

Foliage—Thin, with deeply-lobed, medium size leaves, usually easy to defoliate.

Season—Very early, escaping maximum boll weevil damage and mid-season to late-season moisture shortage.

Bolls—Round ovate, slightly pointed, 70 to 72 per pound, well-fluffed, storm resistant.

Lint Length— $1\frac{1}{3}\frac{2}{3}$ " to $1\frac{3}{3}\frac{2}{3}$ " under average conditions, longer under good conditions.

Lint Percent—37% to 39% under average conditions, higher under more favorable conditions.

Fiber Quality—Excellent, uniform, strong. Sought for and praised by buyers and manufacturers.

Production—High. Widely adapted.

Wilt Resistance—High resistance to Fusarium and tolerant, though not resistant, to Verticillium.

Picking Quality—The best. Type of plants, amount of foliage, fluffiness and storm resistance of bolls, and cleanability of lint well suited to hand and mechanical picking.

PRICES MACHINE DELINTED SEED

Coker 100 Wilt, 1952 Breeder's Registered Seed \$13.75 per 100 lb. bag, \$250.00 per ton.

PRICES ACID DELINTED SEED Coker 100 Wilt, 1952 Breeder's Registered Seed \$11.75 per 50 lb. bag, \$430.00 per ton.

All Prices F.O.B. Hartsville, S. C., and Memphis, Tenn.

ALL SEED TREATED WITH CERESAN

COKER 100 WILT RESISTS VIRULENT SOIL DISEASES

Diseases exact a heavy toll in cotton production each year throughout the cotton belt. Soil-borne diseases, or those carried over in the soil from year to year, are of most importance in causing damage to the crop. Although there are many soil-inhabiting cotton disease organisms, Fusarium wilt, nematodes, and Verticillium wilt account for most of the loss through interfering with the normal uptake of water and fertilizing elements and the translocation of these materials to the leaves and other food-making parts of the plant. Damage may be light or it may be severe enough to cause death of the plant. Loss in yield and quality of seed and lint occurs in varying degrees depending on amount of disease damage. Such losses may therefore not be obvious to the grower in the field except where severe stunting and killing takes place.

FUSARIUM WILT

Fusarium wilt occurs throughout the Cotton Belt from east central Texas and Oklahoma to the Atlantic Seaboard and is particularly severe in the lighter phases of Coastal Plain soils. Plants affected with this disease become stunted due to shortened joints, and leaves become yellow and eventually drop as the disease advances. Yellowing of leaves usually begins on the leaf margin, and both leaf and plant may show a one-sided wilting. Diseased plants have a brownish discoloration under the bark, and brown streaks are seen throughout the woody stem when it is broken or cut through. COKER 100 WILT is highly resistant to Fusarium wilt.

IMPORTANT NOTE

Our Coker 100 Wilt Resistant Cotton has been bred to produce maximum yield on soils infested with Fusarium wilt, and it has some tolerance to Verticillium wilt. However, due to the development of new races of wilt, complicated by adverse seasonal conditions, improper fertilization and cultural practices, and the presence in most instances of nematodes, no conscientious breeder can guarantee any wilt resistant cotton to survive 100 per cent on any wilt infested soils.

NEMATODES

Nematodes—the small eel-like worms that attack plant roots-are present in soils over the entire Cotton Belt. These small parasites, almost invisible to the naked eye, not only cause serious injury due to their feeding on and in roots, but pave the way for more-ready entrance of other diseases such as wilts. The nematode causdiseases such as ing most damage is the root-knotting or root-gall nematode. Others are serious pests, however.

Because of its tolerance to nematodes, COKER 100 WILT RESISTANT COT-TON is well adapted to a wide range of soils infested with other diseases.



C. H. ROGERS, Ph.D. Plant Pathologist

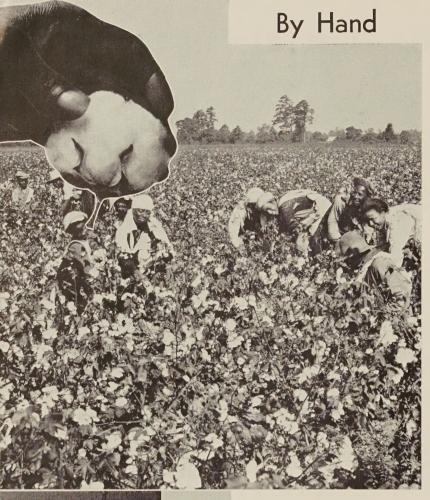
VERTICILLIUM WILT

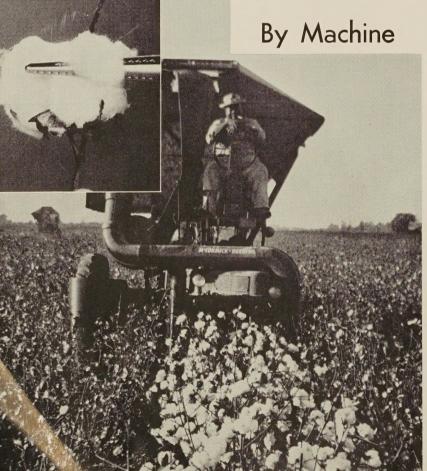
Verticillium wilt is an important disease mainly in the Mississippi Delta and the irrigated areas of the Southwest. The symptoms are similar to Fusarium wilt and usually laboratory diagnosis is necessary to differentiate between the two. Quite often these two diseases occur together, along with nematodes, in the Delta of Arkansas, Mississippi and Missouri. Coker 100 Wilt has some tolerance for, but is not resistant to Verticillium wilt.

Our COKER 100 WILT RESISTANT COTTON has been bred and tested on soils heavily infested with wilt and nematodes, and thus provides the grower higher insurance against losses from these diseases. High costs of production call for elimination of all hazards possible. New races or strains of disease organisms may occur, or seasonal and soil conditions may be such as to alter, in some cases, the reaction of any crop so that losses may be experienced.

All wilt resistant cotton varieties released by Coker's Pedigreed Seed Company are tested for many years on wilt-infested soils. This picture shows two Coker 100 Wilt lines grown on either side of a wilt-susceptible check row in one of our Fusarium wilt studies at Hartsville.







GOOD PICKING WITH COKER 100 WILT

Coker 100 Wilt is especially well adapted to hand or machine picking.

The adaptation of a variety to harvesting with mechanical pickers is determined by the percentage of the total production that is harvested, by the amount of trash in the machine harvested seed cotton, by the amount of trash left in the cotton after gin-cleaning, and by the effect of gin-cleaning upon the fiber.

Coker 100 Wilt, being early and having fluffy bolls, thin foliage, and desirable plant type is especially adapted to machine picking. The ease with which it can be cleaned in the gin assures the grower of a sample with a minimum amount of trash and good preparation.

Mechanical picking tests conducted by the Delta Experiment Station during the four years 1948-1951 and reported in the April 1952, issue of Mississippi Farm Research show that no other variety of cotton had a higher picking efficiency than Coker 100 Wilt. Furthermore, no other variety consistently gave higher grades, when machine picked, than Coker 100 Wilt.

LIKES PICKING QUALITY

"We have grown your Coker 100 Wilt cotton for three years now and are convinced that it is the best adapted variety that we have seen in this territory. All of our neighbors are changing to this fine cotton. This cotton grows lateral branches that tend to turn upward rather than straight out. Coker 100 Wilt grows the lower branches upward enough to keep the bolls off the ground. We also like the picking quality very much. It is especially good with the mechanical picker. We have found that Coker 100 Wilt opens very uniform and that it grows off quicker than other varieties."

Gregg and Gregg By H. L. Gregg, Jr. Sterlington, La.

VERY SATISFACTORY FOR MECHANICAL HARVESTING

"I thought you would be interested in knowing that we have found this variety of cotton (Coker 100 Wilt) to be very satisfactory for mechanical harvesting.... We find that most of this cotton opens up within a very short space of time and that it fluffs out nicely so that it is easy for the spindles to get to the lint..."

Geo. T. Ashford, Sec.-Treas. Liberty Manufacturing Co. Red Springs, N. C.

COTTON BREEDING METHODS

When you buy a sack of Coker 100 Wilt Breeder's Registered Seed you buy more than a bag and 100 pounds of seed. You buy the results of many years of well-planned breeding and careful testing, designed and conducted to give you the very best variety that the ingenuity and knowledge of man and the use of efficient methods and elaborate equipment can produce.

Our cotton breeding program consists of obtaining a promising breeding stock, selecting of outstanding plants within that stock, and subsequent increasing and testing of the progenies of these plants for several years.

ORIGIN OF BREEDING STOCKS

Promising breeding stocks are obtained by hybridization, inbreeding, or by using existing varieties possessing some degree of variability. Crosses are designed to incorporate all of the good characteristics of two or more varieties into one variety and to eliminate all the undesirable characteristics of the parents.

After the cross has been made and the offspring becomes relatively stable, selections are made of the most promising plants based upon an evaluation of their characteristics in the field and in the laboratory.

SELECTION AND TESTING

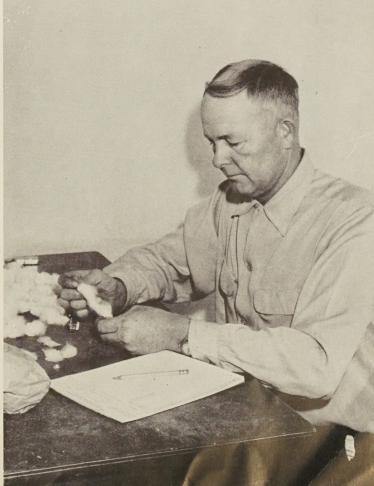
The following year selected plants are grown in progeny rows, the outstanding rows are harvested individually, and the seed cotton is taken to laboratories for complete analyses. Seed from rows having desirable combinations of yield, picking quality, regional adaptation, wilt resistance, staple length, lint percentage, boll size, earliness, fiber tensile strength, upper-half mean and mean lengths, length uniformity, fineness and maturity are planted the following year in 1/2 acre increase blocks and in replicated yield trials. The process of selection, testing, and increasing is continued for five more years. Each year larger increases are grown and tests are more elaborate and more widespread in location than the year previous. In the end a superior variety of cotton is isolated, proven by testing, and a sufficient quantity of Breeder's Registered Seed produced for distribution to farms and certified seed growers.

The breeding process is a continuous one. Every year a new program is initiated by selection of plants, every year a new strain of cotton is released, and every year each of the intermediate steps are in progress.

Breeding and testing phases of the unified program are conducted at Hartsville and Chester in South Carolina; Lake Cormorant and Clarksdale, Mississippi; Leachville, Arkansas; and Huntsville, Alabama. Work at these locations is planned and handled by our own competent staff of cotton breeders and technicians.

ABOVE—Henry W. Webb, Plant Breeder in Charge of Cotton Breeding for the Hartsville, S. C., and Chester, S. C., programs. BELOW—H. Maurice Larrimore, Plant Breeder in Charge of Cotton Breeding for the Mississippi Valley programs.





COKER 100 WILT MAKES IN ALABAMA

SARDIS COMMUNITY WINS 1951 ALABAMA STATE COTTON PRIZE

On May 17, 1949, the Sardis Community in Alabama was organized as a one-variety community and Coker 100 Wilt selected as the variety for planting. In 1950 this community, using Coker 100 Wilt and following improved growing practices, won first place in District III and was awarded a prize of \$500 in the Alabama Community Cotton Improvement Contest, sponsored by the Alabama Cotton Manufacturers Association ciation and the Alabama-Florida Cotton Seed Products Association, and conducted by the Alabama Polytechnic Institute Extension Service. In 1951, continuing the one-variety planting with Coker 100 Wilt, the Sardis Community won the state prize of \$2000.

Immediate improvement in quality and yield followed adoption of the one-variety community plan. Ninety-nine per cent of the community acreage was planted in Coker 100 Wilt, not more than two years from the breeder. Of the cotton submitted for Smith-Doxey Classification, 100 per cent was classed one inch and longer in staple, and normal or better in gin preparation. One hundred per cent graded middling or better. The average yield of lint cotton per acre as compared with a previous five-year average increased 33 per cent.

RESISTS WEATHER DAMAGE

"For the last seven years I have used Coker cotton exclusively. I have tried several other varieties and like Coker 100 Wilt better than any I have ever tried. I like it for its high yielding qualities and its resistance to unusual weather damage."

> P. L. Parker, Jr. Rt. 1, Daleville, Ala.

> > [8]

HIGH YIELD, GOOD STAPLE

"We have used Coker's cottonseed for eight or ten years and find that these seed give us a high yield and good staple length. The farmers around here are well pleased with the good picking quality. We have a wide variety of soils in our area—many of which are susceptible to wilt. Coker 100 Wilt is highly successful in combating this. In fact we have no wilt trouble at all.

"We sell and use about 20 tons of breeder seed every year. Also we sell 150 to 200 tons of first year from breeder seed that we raise on our place. I do not believe that we have ever had a customer that was not pleased and we have new customers every year."

> Henderson Bros. By Jimmie Henderson Millers Ferry, Ala.

ONE VARIETY WINNER

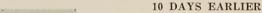
"I have grown Coker cotton exclusively for 15 years and have used Coker 100 Wilt for the past six years. Orrville is a one-variety community and Coker 100 Wilt is the adopted variety. In 1952, Orrville was district winner in the state one-variety cotton contest.

"I have never had any trouble with wilt, and much of my land is subject to wilt. Due to hot, dry weather last year, yields were reduced but my average was 460 pounds of lint cotton per acre, and some fields made more than a bale to the acre. I believe that Coker 100 Wilt is by far the best cotton that I have grown on my farm or that has been grown in this community."

> Floyd F. Farrish Orrville, Ala.

"I planted Coker 100 Wilt breeder seed for the first time last year and made seven bales of cotton on four acres. I like the cotton better than any I have 10 days earlier and makes unusually large bolls. My plans are to use Coker 100 Wilt from now

> J. M. Mattox Rt. 2, Ashland, Ala.



ever grown. It seems to be about



FIRST IN ALABAMA

LEFT—Jesse Hain, president of the Sardis, Alabama. Coker 100 Wilt one-variety community, is shown looking over the \$2000 cash award his community won as first state prize in the 1951 Alabama Community Cotton Improvement Contest. Left to right are O. N. Andrews, Alabama Polytechnic Institute cotton specialist; Hain; Director P. O. Davis of the Alabama Extension Service; and L. C. Allsbrook, county agent for Dallas County. In 1950, the year following organization of the community for one-variety planting, Sardis cotton growers, using Coker 100 Wilt, won first place in their district for a cash award of \$500. LEFT-Jesse Hain, president of the

SUPERIOR PERFORMANCE RECORD IN GEORGIA

A. S. HUNNICUTT 2-TIME GEORGIA STATE WINNER WITH COKER 100 WILT

Since 1949, A. S. Hunnicutt of Statesboro, Ga., has been a consistent winner in the Georgia 5-acre cotton contest with Coker 100 Wilt. Twice state winner and once first place district winner, he is not eligible for the state prize in 1953 but has already booked his Coker 100 Wilt seed to try for the Georgia sweepstakes prize in the 1953 contest. To do this he will have to exceed three bales per acre. Mr. Hunnicutt writes:

"Coker 100 Wilt will produce more in a thick stand than any other cotton I have ever seen growing. It has high storm resistance. It seems like the burs close up when the weather is bad during the opening stage and holds the cotton in. When the weather clears, the burs seem to open right up so that the cotton picks easy.

"In 1949, I was first place winner in this district in the 5-acre cotton contest with 2,312 pounds of seed cotton per acre. In 1950, I was state winner with 3,018 pounds, In 1951, I was not eligible for state honors but did grow 3,160 pounds of seed cotton per acre, and then in 1952 I was state winner again with a yield of 3,198 pounds of seed cotton per acre."

OVERCOMES DRY WEATHER

"I used your cotton seed last year to plant my 12 acres of cotton. In spite of dry weather this 12 acres produced 17 bales. On five acres of the 12, I won second place in this district and the state 5-acre cotton contest. I intend to plant Coker 100 Wilt again this year and have already booked seed with my dealer."

A. C. Murray Fort Valley, Ga.

MORE GIN WEIGHT

"My Coker 100 Wilt made 11,881 pounds of seed cotton on five acres. This was the top yield in the county 5-acre cotton contest and second in the district. I believe that Coker 100

Wilt is the best cotton that can be planted in this section. It showed up better than any variety in last year's dry weather. It will give more weight at the gin. I like the way Coker 100 Wilt stands bad weather during picking, and also the way it picks."

Wayne Matthews Moultrie, Ga.

FIRST IN GEORGIA

RIGHT—A. S. Hunnicutt of Statesboro, Ga., won first place in the 1952 Georgia 5-acre cotton contest with Coker 100 Wilt. Four out of 6 first place district winners were growers of Coker 100 Wilt, and 9 out of 12 second and third place district winners. E. C. Westbrook, Georgia Extension agronomist, is shown in picture at right presenting check to state winner, A. S. Hunnicutt, who produced 13,190 pounds of seed cotton on 5 acres. Right of Hunnicutt, is J. W. Trunnell, first place district winner, and to his left is D. J. Hunnicutt, first place district winner, and to right, all first place district winners, are J. S. Moore, W. F. Gaston, John Luckie and M. L. Johnson.

COKER 100 WILT TOPS ALL VARIETIES IN GEORGIA VARIETY TEST

In a table released by the Georgia Agricultural Experiment Station in which the averages of six cotton varieties at 20 locations, 1949-1951, are given, Coker 100 Wilt produced more money per acre than any other variety included in the tests.

SOLD ON COKER 100 WILT

"In 1951, I planted 17 acres in another variety of cotton. I did not get a stand on three acres and replanted with Coker 100 Wilt. This three acres produced over four bales as compared with nine bales on 14 acres of the other variety. This sold me on Coker 100 Wilt to the extent that I planted my entire crop of 22 acres in 1952 in Coker 100 Wilt. In 1952, I won second place in the county 5-acre contest and plan to use Coker 100 Wilt again this year since I believe it will outyield any cotton grown in this section and give me the highest dollar per acre."

David L. Newton Norman Park, Ga.

BEST WILT RESISTANT COTTON

"I have grown Coker 100 Wilt cotton some five years. One of the years, 1949, I planted a part of my crop in another variety but found that Coker 100 Wilt produced better so have used it 100 per cent ever since. Coker 100 Wilt is the best wilt resistant cotton I have seen growing here. My cotton has always pulled better than an inch staple. I have produced more than a bale per acre every year with Coker 100 Wilt, even in spite of hail storm in 1951. I was first place winner in the Southeast Georgia district in 1952 in the state 5-acre cotton contest with a yield of 2,638 pounds of seed cotton per acre. I always get a good gin turn-out with Coker 100 Wilt."

D. J. Hunnicutt Statesboro, Ga.





COKER 100 WILT MAKES

IN MISSISSIPPI

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J. C BEARD, General Manager

BILLUPS PLANTATION HEATHMAN, MISS.

January 2, 1953.

Coker's Pedigreed Seed Company Hartsville, S. C.

We have planted our entire cotton acreage to Coker 100 Wilt variety for the past seven years, which has been 1600 to 2300 acres annually. Gentlemen:

This cotton has proved beyond any doubt to be the best variety for our location, which is in the heart of the Mississippi Delta.

The earliness, non-wilt qualifications, high yield, good picking qualities for both hand and machine, along with good staple and fiber strength, meets our requirements for a good cotton.

The seven years average lint yield per acre on our operation is among the highest of all varieties planted in Sunflower County, which happens to be one of the largest cotton producing counties in our State.

BILLUPS PLANTATION, INC.

J.C. Beard Vice-President & General Manager.



The Billups Plantation of Heathman, Miss., is one of the largest and best operated plantations in the Yazoo-Mississippi Delta, J. C. Beard, manager of the plantation and author of the accompanying letter, is shown standing in a 2-bale-per-acre field of Coker 100 Wilt cotton.

MATURES QUICKER

"I have been planting Coker 100 Wilt Resistant cotton for four years, also a small amount of another variety. I like Coker 100 Wilt best because I find that it makes more in the field. This past year it took only 1340 pounds of seed cotton to make 500 pound bales. It matures quicker than any cotton I have ever planted and is easy to pick."

> Dennis Copeland Philadelphia, Miss.

OUR BREEDING PROGRAM OF DEPENDABLE. WIDELY

In our Cotton Breeding program we conduct all phases of breeding and testing at many locations throughout the Southeast and in the Mississippi Valley. All strains and varieties are tested in our own trials at least eight years before seed of them are sold. These strains are tested at many State and Federal Experiment Stations throughout the Main Belt from the Carolinas to the Rio Grande Valley. We also employ special testing techniques and statistical analyses to determine the adaptation of our strains to different areas.

By following these procedures we are in the best possible position to: (1) develop a variety that is outstanding in its performance in a given area, (2) develop a variety that is widespread in its adaptation and is a leading producer of highest quality cotton in most parts of the belt, and (3) develop a variety that is well-adapted to a wide range of weather or other environmental conditions.

For many years we, as did other breeders, sold seed of a large number of varieties each year, one for one locality or condition, one for a different requirement, and still others to meet other varying needs. As we intensified our breeding and testing programs, employed techniques that made our work more efficient, and spread our well-planned tests over the cotton belt we were able to develop a cotton—Coker 100 Wilt with a wide range of adaptation and that gave a dependable and satisfactory performance in most parts of the cotton belt. Furthermore because it demonstrated superior performance in tests at a large number of

IN ARKANSAS



MORE DOLLARS PER ACRE

ABOVE-W. Stratton of Pine Bluff, Arkansas, plants 850 acres of cotton land in Coker 100 Wilt and finds that it "returns me more dollars per acre than any of the other several varieties that I have planted before, and which are planted in this territory." Mr. Stratton says, "I like Coker 100 Wilt for its earliness, storm proofness, and its upright growth which makes it suitable for both machine and hand picking." Mr. Stratton has a standing order with C. V. Ware and Son of Pine Bluff for three tons of Coker 100 Wilt cotton seed every year.

SUPERIOR PERFORMANCE RECORD

ASSURES COTTON FARMERS ADAPTED VARIETIES

widely distributed locations and over a period of many years, we know that Coker 100 Wilt is more capable of standing up under adverse weather or other environmental conditions at any one location and over a period of years than are varieties developed under more localized testing.

If, in our breeding and testing programs, we find that a variety is better adapted for any particular area, over a period of years, than is our general variety we will release the specialized variety to farmers in that area with the assurance of its being a superior cotton for their planting.

"EXCEPTIONALLY SATISFACTORY"

"We have been using Coker cottons for the last 18 or 20 years on the Moore Plantations in LaFayette County, Arkansas. In our opinion your Coker 100 Wilt is exceptionally satisfactory both as to turn-out, easy picking, staple and grade. Formerly, many of our tenant hands bought their own seed of other varieties, but now, of their own volition, all use Coker seed."

Mrs. Henry Moore, Jr. Texarkana, Texas

ONLY COTTON TO PLANT

"For ground that takes the wilt, it's the only cotton to plant . . . For a drought like we had last year, a bale per acre around Arbyrd, Mo., is tops and sure good enough for me."

Elmo Crum Arbyrd, Missouri

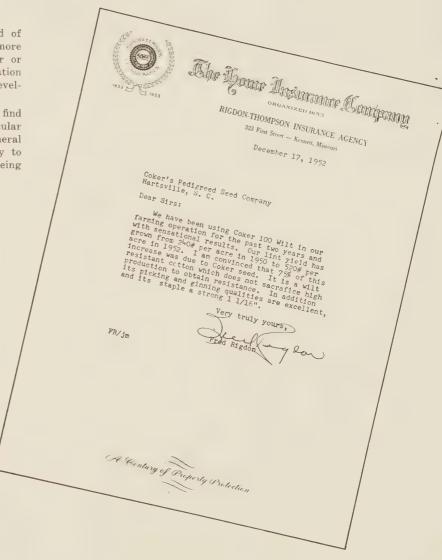
MISSOURI VARIETY TEST RESULTS

Coker 100 Wilt produced the highest average yield of any of the seven varieties included in tests conducted by the Missouri Agricultural Experiment Station at White Oak during the years 1949-1951, according to a report issued by the University of Missouri.

University Agronomists report that in a test of 9 varieties, conducted in the same area in 1952, that Coker 100 Wilt produced a higher money value per acre than any other variety.

In a test of 11 varieties conducted by an independent farm operator on Highway 61, during 1951, near New Madrid, Coker 100 Wilt produced a higher yield of seed cotton, of lint, and of money value per acre than any other variety included in the test.

IN MISSOURI



HIGH YIELD ON SANDY LAND

"I can't refrain from praising the merits of Coker 100 Wilt. This last year I planted registered Coker seed on a 40-acre plot and produced a bale and a half per acre. This particular farm is very poor sand and had produced, on an average, 400 pounds of lint per acre. For the past few years I have experimented with several varieties of cotton, hoping to find the most suitable. After this year's planting and gathering of Coker 100 Wilt, I have concluded that it is the answer to my problem. Many of my neighbors watched the progress of my 40 acres of Coker 100 Wilt and were certainly favorably impressed."

J. O. Phillips Senath, Missouri



FIRST IN NORTH CAROLINA

In 1950, all North Carolina 5-acre cotton contest winners planted Coker 100 Wilt cotton. In the above picture from left to right are C. W. Matthews, J. R. Bullard, G. E. Bullard, J. A. McLamb, all of Cumberland County, and Miss Wilkinson of Scotland County, J. R. Bullard and Mr. Matthews were co-winners of the first state prize, producing 5,600 pounds of lint on 5 acres. G. E. Bullard was winner of first prize in the second district, producing a yield of 4,905 pounds of lint on 5 acres. Miss Wilkinson took second prize in the second district, 4,330 pounds of lint on 5 acres, and Mr. McLamb, third prize in the second district, 4,390 pounds of lint on 5 acres. No state 5-acre contest was held in North Carolina in 1951 or 1952.



FIRST IN SOUTH CAROLINA

Coker 100 Wilt took first and second state prizes, all first place district prizes and two out of three second place district prizes in the 1952 South Carolina 5-acre cotton contest. Bosie Williams, second from left on front row, Greenwood County, took first prize of \$750 with a yield of 5,910 pounds of lint on 5 acres. Second prize of \$275 was won by W. T. Elrod, extreme left on front row, Pickens County, who produced 5,170 pounds. Other first and second place district winners were, front row beginning third from left, Otis J. Crapse, first, lower district; Paul J. Crapse, second, lower district; back row, left to right, Julian Little, first, upper district; R. W. Betts, second, upper district; E. F. Canipe, first, middle district; J. C. Bouknight, second, middle district. Coker 100 Wilt has won first place in the South Carolina 5-acre cotton contest every year except one since it was started in 1926.

COKER 100 WILT

Southeast's Standard Cotton

Coker 100 Wilt has proven itself to be the Southeast's standard cotton by (1) the large percentage of total acres planted with it, (2) the excellent performance in 5-acre contests, (3) by being a consistent high yielder of superior cotton in Federal and State Variety Tests and, (4) by the opinions of thousands of successful cotton growers and agricultural workers.

In 1952, 98 per cent of all the cotton acreage in North Carolina was planted in Coker 100 Wilt, in South Carolina 99 per cent of the cotton grown was Coker 100 Wilt and in Georgia and Alabama the percentages of the cotton acreages in Coker 100 Wilt were 60 and 41, respectively.

In 37 5-acre statewide contests in North Carolina, South Carolina, and Georgia, Coker 100 Wilt has won first place 35 times.

Coker 100 Wilt has made an outstanding record in yield trials conducted by the Agri-cultural Experiment Stations in the South-eastern States as shown by reports issued by agronomists and pathologists at these stations.

Letters from farmers, one variety community organizations and county agents in all parts of the Southeast praising Coker 100 Wilt are written evidence of its superior yield, high quality, and top selling value.

TWO BALES PER ACRE

"I have been growing Coker 100 Wilt cotton constantly since it came into Union County. I have always been well pleased with its per-formance. My normal acreage is about 150 acres. Since starting to grow Coker 100 Wilt, I have obtained yields in some cases of about two bales per acre. In 1952 we had a rather unfavorable season, but I averaged a bale per acre on my entire 150 acres. I buy sufficient Breeder Registered seed each year to grow a seed supply for my farm the following year."

W. J. McAteer Monroe, N. C.

COKER 100 WILT TAKES SWEEPSTAKES PRIZE

BELOW-In 1951, J. Maurice Smith, of Edgefield Coun-BELOW—In 1931, J. Maurice Smith, of Edgeneid County, South Carolina, won the sweepstakes prize with Coker 100 Wilt in the official South Carolina 5-acre cotton contest by producing 17 bales of cotton on five acres for an all-time production record in Southeastern United States, flis record was 8,380 pounds of lint on five acres with a staple length of 1\(^3\)\(^2\



[12]

VARIETAL PERFORMANCE AND WEATHER

It has been definitely proven by experimentation and by farmer experience that the yield and fiber qualities of cotton are governed by inherent characteristics and by environmental conditions. The superiority of some varieties over others in regard to yield per acre and milling quality of fiber has been well established. On the other hand, there is a long list of unfavorable weather conditions that adversely affect yield and quality in cotton. Material modifications of size of boll, lint percentage, and staple length may be also found under certain weather conditions.

1952 UNFAVORABLE SEASON

The summer and early fall of 1952 were characterized by unusually high temperatures, and little or no rainfall throughout practically the entire main cotton belt. In many areas, particularly in the Southeast, 1952 was probably the hottest and driest in the memory of most people. As a result cotton yields were low, bolls very small, staple extremely short, lint percentage unusually low, and in some cases fiber quality inferior. On many farms, bolls cracked open prematurely and boll rot resulted. Obviously, the low yields and lowered fiber quality resulted in very small profits or even losses in cotton production for many growers who in normal seasons find their operations profitable.

COKER 100 WILT PERFORMED WELL

It was observed in our own tests in many locations in the Southeast and in the Mississippi Valley, in State and Federal Experiment Station tests, and in farmers' fields that the best cotton varieties were seriously affected by these adverse weather conditions. It was also observed that in tests when leading commercial varieties were grown side by side that Coker 100 Wilt performed as well under these adverse conditions as any other variety, and in no case was there any more reduction of yield, decrease in boll size, shortening of staple, lowering of ginning percentage, or premature cracking of bolls in Coker 100 Wilt than there was in any other variety. Farmers throughout the South have advised us that their Coker 100 Wilt yielded much more during 1952 than they had expected under the existing conditions and they were amazed at the way this variety could "take it."

In our breeding program we have always tested our varieties and strains at a large number of widely distributed locations and over periods of several years. This means that the cottons that we save for increase and for sale to farmers are well adapted to a wide range of locational and weather conditions. For this resson Coker 100 Wilt is more capable of standing up under adverse weather conditions than are varieties developed under more localized testing.

AVERAGES OVER 2 BALES PER ACRE

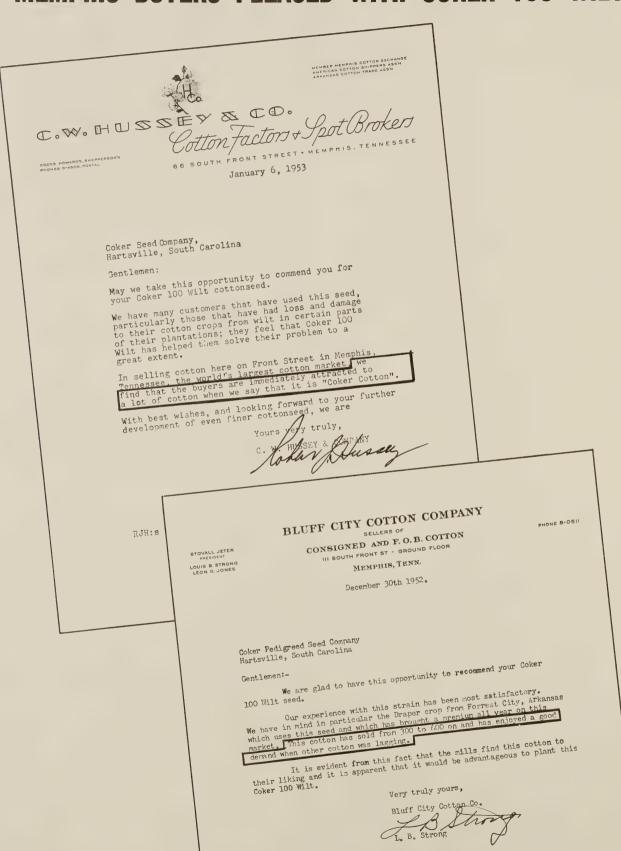
"I would like to make a report to you on the Breeder Registered Coker 100 Wilt cotton seed I bought last spring from Jones, Son and Company in Rich Square. I planted one 14-acre field of this cotton on my home farm and picked 30 bales of cotton from this field that averaged 525 pounds of lint per bale. I also had about 14 acres of this same cotton on another farm that averaged nearly two bales per acre. I had been reading about these Pedigreed seed and high yields, but I did not believe until this year that an average cotton farm could average two bales of cotton per acre. I attribute my extra good crop to the best seed and weevil control."

Raymond Moore Halifax, N. C.

Possessing superior fiber properties, a high degree of disease resistance and combining ease of picking with satisfactory storm resistance, giving consistently good yields year in and year out in many sections and on various soil types throughout the cotton belt, Coker 100 Wilt Resistant has earned the reputation of being "an all 'round cotton'—satisfactory to the cotton grower, the buyer and the spinner.



MEMPHIS BUYERS PLEASED WITH COKER 100 WILT



ADEQUATE EQUIPMENT MEANS

- 1. More Efficient Breeding
- 2. Purity of Seed Stocks
- 3. Better Varieties

In our field and laboratory work our breeders use the best equipment possible to assure you of pure seed stocks of superior varieties. Sometimes the type of equipment needed is not available and has to be designed and built especially for us.

Examples of equipment used in our cotton breeding programs are shown on this page. On the right, top is a 16" roller gin which is used to gin plant selections which consist of one-fourth to one pound of seed cotton. This equipment is designed to completely gin these small samples and to allow the recovery of seed and lint for weighing and lint percentage determination. Construction is simple and there is no danger of mixing of seed which fall in a box at the knees of the operator.

In the center is a 20-saw gin complete with fan, seed cotton conveyer, separator, cleaner-feeder, saws, brush, and condenser. Single-row samples ranging from 5 to 25 pounds seed cotton and first year increase blocks ranging from 200 to 1500 pounds of seed cotton are ginned on this equipment. All seed and lint can be recovered in the ginning process and weighed for lint percentage calculations. Every part of the equipment is designed for quick inspection and easy cleaning to avoid any mixing of seed cotton or of seed.

The bottom picture is a gin with three 80-saw stands. This equipment is used to gin seed cotton from increase blocks yielding a bale or more. The unloading fan and pipes, dropper, distributor, cleaners, gin breasts, and seed conveyers are easily inspected and quickly cleaned and there is no mixing of seed in the ginning process.

There is much more specially designed equipment that is used in the planting, harvesting, and weighing of experimental plots; in the determination of fiber and seed qualities; and in the compiling and calculation of data.

FRUITS CLOSE

"I have used Coker 100 Wilt cotton seed since 1948. It fruits close, the joints are close, it can be left in a thicker stand than some other varieties, and it has less foliage than many cottons grown here. During these five years I have grown more than a bale per acre. In 1952, I was third place district winner in 27 Southeast Georgia counties in the state 5-acre cotton contest. I have booked all my planting seed already and they are Coker 100 Wilt."

Embree C. Hunnicutt Statesboro, Ga.

PRIZE WINNING YIELDS

"I have planted Coker 100 Wilt cotton since 1948. With this variety I have been able to win the state 5-acre contest in 1948, second place district prize in 1951, and first district prize in 1952. I am well satisfied with Coker 100 Wilt and intend to plant it again this year."

J. W. Trunnell Cochran, Ga.



ACID DELINTED COKER 100 WILT RESISTANT COTTON SEED

1952 Breeder's Registered Seed

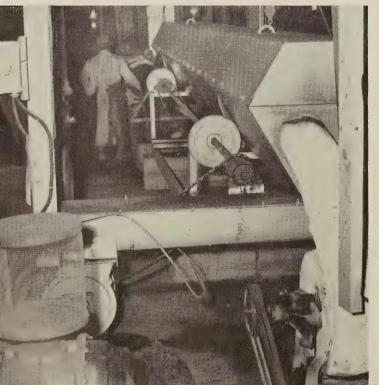
Although the bulk of our Coker 100 Wilt 1952 Breeder registered cotton seed is being offered as machine delinted seed, we have a limited supply of acid delinted seed of this variety available.

These seed were processed in our recently installed, modern acid delinting plant. They were carefully cleaned, uniformly graded, treated with Ceresan, and germinate well over 80 per cent.

We have had many years of experience in processing and planting acid delinted cotton seed on our farms here and feel safe in recommending them to our customers provided our suggestions on the use of acid delinted seed listed below are carefully followed,

SUGGESTIONS ON USE OF ACID DELINTED SEED

- 1. Under normal conditions, acid delinted seed permit precision planting, germinate quicker, producing more vigorous plants that allow earlier and closer cultivation.
- 2. Soils should be well prepared with good firm seed bed. Do not plant on rough, cloddy land that has a tendency to form a hard crust.
- 3. Fertilizer should be placed 3 inches to one or both sides of seed, and 2 inches below, if equipment is available; or mix in row, bed about 10 days prior to planting.
- 4. Acid delinted seed will not stand periods of unfavorable weather conditions as well as machine delinted seed. They will either come up quickly or die and, therefore, care should be taken to plant seed when there is enough moisture in the soil to bring them up to a full stand.
- 5. Use drop seed planter with corn or pea plate with holes reamed or filed out to hold from 4 to 6 seed each. Use from 10 to 15 pounds seed per acre on light to medium soils, 15 to 20 pounds on medium to heavy soils. (Our 1952 Breeder's Registered Coker 100 Wilt acid delinted seed average approximately 4,770 to the pound.)
- 6. When using drop seed planter with tractor, be sure that planter is properly adjusted and tractor speed regulated to drop seed rather than sow them. If regular sower type planter is used, at least 20 pounds of seed per acre will be required.
- 7. Cover seed to a depth of about 1 to $1\frac{1}{2}$ " and give them a good firm pack,



PLANTING CHART FOR COKER 100 WILT RESISTANT ACID DELINTED COTTON SEED

Width of Row	Spacing in Drill	4 Seed Per Hill	5 Seed Per Hill	6 Seed Per Hill
3 ft.	9 in.	16.4 lbs.	20.6 lbs.	24.6 lbs.
3 ft.	12 in.	12.4 lbs.	15.4 lbs.	18.4 lbs.
3 ft.	15 in.	10.7 lbs.	12.4 lbs.	14.8 lbs.
3⅓ ft.	9 in.	14.1 lbs.	17.6 lbs.	21.1 lbs.
3½ ft.	12 in.	10.6 lbs.	13.3 lbs.	15.9 lbs.
3½ ft.	15 in.	8.5 lbs.	10.6 lbs.	12.6 lbs.
4 ft.	9 in.	11.5 lbs.	15.4 lbs.	18.4 lbs.
4 ft.	12 in.	10.1 lbs.	12.6 lbs.	15.1 lbs.
4 ft.	15 in.	7.4 lbs.	9.2 lbs.	11.1 lbs.



Showing acid delinted Coker 100 Wilt Resistant cotton seed actual size—average 4,770 seed per pound.

[16]

PHOTO LEFT shows section of one of our two cotton seed acid delinting plants. In the foreground is the vat where delinted seed are dried with heated air.

BELOW—After seed have been treated with acid and thoroughly dried they are carefully cleaned on seed grader shown in photo, and then pass through air blast which removes any remaining light weight, immature or faulty seed. The sound, well developed seed are then conveyed by air blast into the seed treating machine where seed protectant is applied. Finally they are bagged in new cotton bags of 50-pounds each bearing our Red Heart trade-mark—your guarantee of quality.



MECHANIZATION STUDIES

Comparative costs of producing cotton by partial mechanization and by complete mechanization in our 1952 tests.

	138.44
B. Complete mechanization	98.51
Difference in favor of complete mechanization \$	39.93

. Cost per pound of lint	
A. Partial mechanization	32.71¢
B. Complete mechanization	23.89¢
Difference in favor of complete mechaniza	ation 8.82¢

Detailed information concerning these mechanization studies may be obtained by writing us.

BELOW-Photo taken four weeks after planting showing results of application of pre-emergence herbicide. Note grass free areas adjacent to cotton rows where band of chemical was applied at planting time.

BOTTOM—Showing four-row tractor equipment which completes planting, fertilizing and pre-emergence weed control application in one operation.

INSET-James H. Arnett, Agricultural Engineer, who supervised the mechanization test. He was assisted by J. O. Brewer.



ABOVE-Richard S. Cathcart, General Farm Manager, under whose direction cotton mechanization experiments were conducted.



PROPER DISTRIBUTION OF SEED ESSENTIAL IN OUR PROGRAM

From the pages of this catalog we hope that you have obtained a clearer understanding of the responsibility we have in breeding and maintaining superior varieties of cotton for the farmers of the South. Our Company alone is responsible for the maintenance and improvement of the varieties of cotton we offer now and in future years.

It is also our responsibility to distribute registered seed of our cotton varieties on an equitable basis among the cotton producers in the South. Our supply of registered cotton seed is limited to the production from our breeding stocks. It is normal to expect that the quantity of available seed will vary from year to year depending upon seasonal conditions and germination. In those years of decreased supply it is the policy of our Company to allot seed to our customers based on past purchases.

In an effort to accomplish proper distribution of our registered cotton seed over the South, we have sales representatives in North Carolina, South Carolina, Georgia, Alabama, and the Mississippi Valley. These sales representatives are constantly in touch with our seed dealers throughout the major cotton producing areas of each state and are available at all times to assist our customers with their cotton seed planting problems. For the convenience of our customers in the Mississippi Valley, we have a sales office at 514 Cotton Exchange Bldg., Memphis, Tenn., also cotton seed in storage there for immediate shipment.

It has been the privilege of our Company to distribute seed of our varieties of cotton to customers over the South for a half century. Through our con-

stant efforts in breeding and distributing seed of superior varieties of cotton we hope that we will merit your continued support.

SALES MANAGER

J. WALLACE TALBERT Home Office—Hartsville, S. C. Telephone Number: 424

SALES REPRESENTATIVES

HENRY L. COOKE 2206 Fairview Road—Raleigh, N. C. Territory: North Carolina and Southern Virginia Telephone Number: 2-3083

J. T. BELUE Route 1, Box 4—Auburn, Alabama Territory: Alabama and East Tennessee Telephone Number: 864

JOHN B. PRESTON 806 Forest Avenue—Tifton, Georgia Territory: Georgia and Northern Florida Telephone Number: 866

M. DAN LAMBERTH
514 Cotton Exchange Bldg.—Memphis, Tennessee
Territory: Mississippi Valley States
Telephone Number: 5-7229

Our Sales Representatives, left to right: Henry L. Cooke, J. T. Belue, John B. Preston, M. D. Lamberth, J. W. Talbert.



TERMS and CONDITIONS

OUR RESPONSIBILITY—Our seed are all carefully tested for germination and purity before shipment. Attached to every bag of seed we ship is a card on which is printed the percentage of germination and mechanical purity of that particular lot of seed. Under no circumstances, however, can we be responsible for the germination of the seed after they have been planted for there are many reasons for imperfect germination of planted seeds other than their vitality. In no case do we give any warranty expressed or implied as to the productivity or performance of our seed.

YOUR PROTECTION—Our seed are all sent out in bags labeled "COKER'S PEDIGREED SEED" and bearing our Registered Red Heart Trade Mark. Each bag also bears our O.K. tag and is officially sealed before leaving our warehouse. No seed is genuine "COKER'S PEDIGREED SEED" unless it bears our official O.K. tag under seal and our Registered "TRADE MARK." Protect yourself by insisting upon having only seed bearing our official O.K. tag and Registered Trade Mark.

REGISTERED SEED—All our pedigreed cotton seed are classified as "BREEDER'S REGISTERED SEED" and are tagged with the purple tag of the State Crop Improvement Association. We are the original source of seed of Coker 100 Wilt Resistant cotton from which blue tag certified seed can be produced.

OUR CLAIMS—The claims we make for our seed are based on their actual performance in our breeding plots, variety tests, and increase fields. They are ALL bred, grown, prepared, tested, and stored under our personal supervision and control.

EFFECT OF GROWING CONDITIONS—Our descriptions are based on the actual records that our varieties have produced in our tests, and they will show the same characteristics elsewhere under the same conditions. Drought or POOR CONDITIONS will result in a reduced yield and poorer quality—no matter what variety is planted.

ONE PRICE POLICY—Our Company has, since its beginning, strictly adhered to the policy of selling its products on one schedule of prices to all. These prices are based on the quantity of the purchase and are published in our catalogs, price lists and pamphlets.

It is our policy to ship or deliver on a C.O.D. basis all seed that have not been paid for at the time of shipment or delivery. All seed are shipped freight or express collect.

Annyakogogas caaratoagakanog



HARTSVILLE, SOUTH CAROLINA

1953 SEASON



COKER 100

WILT RESISTANT

COTTON

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